App. No. 10/706,281

In the Claims:

1 (cancelled)

2. (new) An device which comprises an electronic ballast for control and activation of ho fluorescent lamps (a) capable of operating from one to six lamps and in any environment, and incorporating a proprietary structure and containing a properly customized and integrated electronic circuit (1), arranged in a protective casing for internal and external environments, and which operates in distribution power from ninety to two hundred and fifty volts at the input of the same connection voltage point, and being formed by a power factor rectification and control block (2), a half-bridge block (3) and an ignition pulse block (4), the power factor rectification and control block (2) having the power to rectify and accommodate the electric energy to unit power factor and, at its input, an electronic circuit for the noise reduction of the electromagnetic interference (EMI); the half-bridge block (3) receiving the conditioned energy from the power factor rectification and control block (2) and making available high frequency energy (square wave) converted to alternating wave of activation and control of energy, protection against complete absence of load, delivery of power to the output blocks for a determined period of time and checking of the presence or not of load; the ignition pulse block (4) being provided with a power supply for the activation via peak-to-peak pulses and a high voltage shock protection system.

3. (new) A device as in claim 1 in which has a power factor correction circuit that utilizes a dedicated commercial integrated circuit that operates in critical conduction current mode, which provides it with a power factor close to the unit.

4. (new) A device as in claim 1 in which has an input circuit for the reduction of electromagnetic interference noises is using two EMI filters with a capacitor between them.

5. (new) A device as in claim 1 in which has an input circuit for the reduction of electromagnetic interference noises is using a plurality of EMI filters with a capacitor between them.

6. (new) A device as in claim 1 in which has a protection system that guards the inverter power unit against overheating in the output circuit, in which the circuit controlling it is temporarily disconnected by means of a Positive Thermal Coefficient component.

7. (new) A device as in claim 1 in which said output circuit possesses a dedicated commercial circuit for the lamp ignition and control.

8. (new) A device as in claim 1 in which two capacitors are coupled in parallel with the output switches.

9. (new) A device as in claim 1 in which pre-heating is achieved by increasing the frequency above the nominal operating frequency in permanent regimen voltage for a period of time.

10. (new) A device as in claim 1 in which is capable of normal operation with an input voltage ranging from 90 Volts to 132 Volt.